BESCHWERDEKAMMERN DES EUROPÄISCHEN PATENTAMTS

BOARDS OF APPEAL OF THE EUROPEAN PATENT OFFICE

CHAMBRES DE RECOURS DE L'OFFICE EUROPEEN DES BREVETS

Internal distribution code:
(A) [ ] Publication in OJ
(B) [ ] To Chairmen and Members
(C) [ ] To Chairmen
(D) [X] No distribution

Datasheet for the decision of 19 February 2009

Case Number: T 0742/06 - 3.2.04

Application Number: 96200457.8

Publication Number: 0728412

IPC: A01J 5/017

Language of the proceedings: EN

Title of invention:
An implement for milking animals

Patentee:
MAASLAND N.V.

Opponents:
DeLaval International AB
WestfaliaSurge GmbH

Headword:
Additional Teat Cup/MAASLAND

Relevant legal provisions:
-

Relevant legal provisions (EPC 1973):
EPC Art. 54(1), 56

Keyword:
"Novelty (yes)"
"Inventive step (no)"

Decisions cited:
T 0389/86, T 0056/87, T 1138/02

Catchword:
-

Europäisches Patentamt | European Patent Office | Office européen des brevets

Beschwerdekammern | Boards of Appeal | Chambres de recours

Case Number: T 0742/06 **-** 3.2.04

D E C I S I O N
of the Technical Board of Appeal 3.2.04
of 19 February 2009

Appellant: (Opponent I)
DeLaval Internationl AB
P O Box 39
S-147 21 Tumba (SE)

Representative:
Amery, Marcus James
Carpmaels & Ransford
43, Bloomsbury Square
London WC1A 2RA (GB)

Party to the proceedings: (Opponent II)
WestfaliaSurge GmbH
Siemensstr. 25-27
D-59199 Bönen (DE)

Representative:
Schütte, Hartmut
Patentanwalt
Beethovenstrasse 34
D-59302 Oelde (DE)

Respondent: (Patent Proprietor)
MAASLAND N.V.
Weverskade 10
NL-3155 PD Maasland (NL)

Representative:
Corten, Maurice Jean F.M.
Octrooibureau Van der Lely N.V.
Weverskade 110
NL-3147 PA Maassluis (NL)

Decision under appeal:
Interlocutory decision of the Opposition Division of the European Patent Office posted 18 April 2006 concerning maintenance of European patent No. 0728412 in amended form.

Composition of the Board:

Chairman: M. Ceyte
Members: P. Petti
T. Bokor

Summary of Facts and Submissions

I. In its interlocutory decision dated 18 April 2006, the opposition division found that, having regard to the amendments submitted by the patent proprietor, the European patent No. 0 728 412, against which two oppositions had been filed, met the requirements of the European Patent Convention.

Claim 1 held allowable by the opposition division reads as follows:

"1. An implement for automatically milking animals, such as cows, comprising a milking box (1) with a milking robot, the milking robot comprising milking means with teat cups (28) connectable to the teats of the animal and cleaning and foremilking means with at least one additional teat cup (29) connectable to the teats of the animal, **characterized in that** the milking robot (11) further comprises gripping means (12, 13, 15-19) with at least one gripper (12) to engage the teat cups (28, 29) individually and to connect the teat cups (28, 29) to the teats."

II. Opponent I (hereinafter appellant) lodged an appeal against this decision on 16 May 2006 and simultaneously paid the appeal fee. A statement setting out the grounds of appeal was received on 23 August 2006.

III. Oral proceedings before the board were held on 19 February 2009. Opponent II, who had been duly summoned, did not attend the oral proceedings. Pursuant

to the provisions of Rule 71(2) EPC the proceedings were held without him.

IV. The following documents played a role in the present proceedings:

D1: D. Schillingmann and R. Artmann, *"Alternative zur Handhabung der Melkbecher"*, in *"Robotereinsatz in der Landwirtschaft am Beispiel des Melkens"*, 1990, pages 111 to 127;

D2: WO-A-94/12019;

D4: EP-A-213 660;

D6: D. Schillingmann, *"Untersuchungen zum robotgestützten Melken"*, in *"VDI Fortschritt-Berichte"*, 1992, pages 40 to 91;

D7: EP-A-630 558.

V. The appellant requested that the decision under appeal be set aside and the patent be revoked.

The patent proprietor (hereinafter respondent) requested that the appeal be dismissed (main request) or, in the alternative, that the decision under appeal be set aside and the patent be maintained on the basis of either the first or the second auxiliary request filed with letter dated 13 January 2009.

VI. Claim 1 of the first auxiliary request reads as follows: (added features underlined by the board)

"1. An implement for automatically milking animals, such as cows, comprising a milking box (1) with a milking robot, the milking robot comprising milking means with teat cups (28) connectable to the teats of the animal and cleaning and foremilking means with at least one additional teat cup (29) connectable to the teats of the animal, **characterized in that** the milking robot (11) further comprises gripping means (12, 13, 15-19) with at least one gripper (12) to engage and move the teat cups (28, 29) individually and to connect the teat cups (28, 29) to the teats.

VII. Claim 1 of the second auxiliary request reads as follows:

"1. An implement for automatically milking animals, such as cows, comprising a milking box (1) with a milking robot, the milking robot comprising milking means with teat cups (28) connectable to the teats of the animal and cleaning and foremilking means with at least one additional teat cup (29) connectable to the teats of the animal, **characterized in that** the milking robot (11) further comprises a robot arm for carrying a single teat cup and having gripping means (12, 13, 15-19) with at least one gripper (12) to engage the teat cups (28, 29) individually and to connect the teat cups (28, 29) to the teats."

VIII. The appellant essentially submitted that the subject-matter of claim 1 of main, first and second auxiliary requests lacked novelty over each of documents D1, D2,

D6 and D7 or did not involve an inventive step, particularly in view of D1 and D7.

The respondent submitted that the claimed subject-matter was novel and involved an inventive step. In particular, he argued that none of the cited documents suggested the use an additional teat cup for foremilking and for cleaning the teats.

Reasons for the Decision

Since the European patent was already granted at the time of the entry into force of the EPC 2000 on 13 December 2007, the transitional provisions according to Article 7 of the Act revising the EPC of 29 November 2000 and the Decisions of the Administrative Council of 28 June 2001 and of 7 December 2006, Article 2, have been applied. When Articles or Rules of the version of the EPC 1973 are cited, the year is indicated.

1. The appeal is admissible.

2. *Novelty*

2.1 Each of documents D1 or D6 discloses an additional teat cup for foremilking without any cleaning means.

Neither D2 nor D7 clearly disclose a gripper to engage the teat cups individually and to connect them to the teats.

2.2 Therefore, the subject-matter of claim 1 of main, first and second auxiliary requests is novel over these prior art citations (Article 54(1) EPC, 1973).

3. *Inventive step (main request)*

3.1 D1 discloses (see particularly Figure 9 and its description on pages 118 and 119) an implement for automatically milking animals comprising a milking box with a milking robot comprising milking means with four teat cups connectable to the teats of the animal and an additional fifth teat cup connectable to the teats of the animal and capable of foremilking the animal. The milking robot further comprises a robot arm having gripping means ("Mehrfachgreifer") provided with an internal teat cup magazine ("Melchbechermagazin") and with a gripper ("Greifer") to engage all teat cups individually and to connect them to the teats of the animal.

The implement according to D1 can also be provided with an external teat cup magazine arranged near the milking box (page 116: "ein externes Magazin"; page 118: "[ein] neben der Melkbox angebrachte[r] Magazin").

3.2 The subject-matter of claim 1 differs from this prior art in that

(i) the additional teat cup is suitable for a combined foremilking and cleaning.

3.3 In this known system the normal milking is performed by four teat cups and foremilking by a separate teat cup. The skilled person would realise that this kind of

arrangement is designed so as to reduce the contamination of the usable milk for human consumption by the foremilk. That latter is removed by a distinct (fifth) teat cup.

Thus starting from D1 as closest prior art the objective technical problem underlying the claimed invention may be seen in improving the hygiene level of the milking while retaining the advantage of a reduced contamination of the usable milk by the foremilk with the aid of separate teat cup(s) for removing the foremilk.

The skilled person confronted with the problem of improving the hygiene level of the apparatus of D1 would seek to incorporate cleaning means into the milking robot apparatus disclosed therein. In fact, cleaning the teats of animals prior to milking has been a practical necessity for as long as milking has been practised and it has been a mandatory requirement for a considerable period of time. In doing so, a skilled person would consult D7 which teaches to incorporate cleaning means into the milking robot apparatus and which seeks "to improve the quality of milk" (see column 1, second paragraph), like the claimed invention.

D7 discloses two embodiments. In the first embodiment (Figures 1 to 3) a first robot arm is provided with teat cups and a second robot arm with a cleaning and massaging device. With respect to this embodiment no reference is made to means for removing foremilk.

In the second embodiment (Figures 5 to 7) a first robot arm is provided with a sensor (98) to determine the coordinates of the teats whereas a second robot arm is provided with a cleaning and massaging device (107) in the form of a teat cup, "which can also be utilised as a foremilking device." (column 10, lines 42 to 49).

It is true that, as submitted by the respondent and also as explained in the reasons of the decision T 1138/02 of the Board 3.2.04 (in a different composition), the second embodiment relates to a so-called "universal" teat cup capable of performing foremilking, cleaning and milking all together in such a way that foremilk does not come into contact with the usable milk for human consumption. However the above quoted passage clearly teaches an alternative where the cleaning and massaging device is used as foremilking device. Therefore, for the skilled person seeking to solve the above problem of improving the hygiene level of the milking in D1 and wishing to maintain separate teat cup(s) for removing foremilk so as to avoid contamination of the usable milk by foremilk, it would have been obvious to provide the separate (fifth) teat cup of D1 with a cleaning and massaging device as taught by D7.

When assessing inventive step it should also be kept in mind that it is not justified to isolate parts of a prior art document which would be distinct from, or even in contradiction with the integral teaching of the document, see for instance T 56/87 OJ EPO 1990, 188. However, in the present case the combination of a cleaning device with a foremilking device, the whole being mounted on a robot arm does contribute to

achieving the object stated in D7, namely that of improving the quality of milk in a milking robot apparatus. So does the further alternative using the so-called universal or all-in-one teat cup. Moreover, the skilled person wishing to maintain a strict separation between the teat cups for normal milking and those for removing foremilk as known from D1 would obviously choose the alternative disclosed in the above quoted passage, instead of the further alternative using an universal or all-in-one teat cup.

3.4 In this respect, the respondent essentially submitted the following arguments:

(a) The prior art neither discloses nor suggests the use of one or two teat cups for milking the teats of the rearmost udder quarters, while using at the same time additional teat cups for cleaning and foremilking the teats of the foremost udder quarter, so that the milking is effected more efficiently.

(b) If the skilled person were to consider the teaching of D7, he would provide the implement of D1 with a universal teat cup capable of foremilking, cleaning and milking all together.

In this respect, the respondent referred to the decision T 1138/02 in which D7 was said to disclose an universal or all-in-one teat cup.

The board cannot accept these arguments for the following reasons:

(a') Claim 1 does not recite the specific features which are necessary to achieve the advantage referred to in the above point (a). These features are specified in claim 4 of the patent as granted.

Moreover, this advantage can also be achieved by the implement of D1 in so far as after foremilking of a first teat, the additional teat cup can be removed and positioned in an external teat cup magazine, then a "normal" teat cup can be connected to the teat (see page 119: "Jeweils bevor der eigentliche Melkbecher angesetzt wird, werden die ersten Milchstrahlen in den fünften Melkbecher gemolken, der dann entsprechend umgehängt wird"), whereafter the additional teat cup can be connected to a second teat in order to perform foremilking of this second teat (while the "normal" teat cup is connected to the first teat).

(b') According to D7, "[a]t the end of the second part 106 of the robot arm construction, there is provided a second exemplary embodiment of a cleaning/massaging device 107, which can also be utilized as a foremilking device" (see column 10, lines 42 to 46) and "[i]t will be obvious that with the foremilking device 107 it is also possible to milk "normally" teat after teat" (see column 10, lines 49 to 51). Thus, D7 teaches a first alternative where a teat cup is used for cleaning and foremilking and a second alternative where an universal teat cup is used.

When consulting D7 or another prior art document, the notional skilled person does not act out of

idle curiosity but with the purpose of solving the technical problem underlying the claimed invention. The answer to the question whether or not a prior art document suggests the claimed solution depends on a large part on the definition of the corresponding technical problem. This latter has to be defined in an objective manner on the basis of the differences between the claimed subject-matter and the closest prior art. It is observed in this respect that the above decision T 1138/02 deals with a different invention and the technical problem to be solved starting from the closest prior art D1 was not formulated in the way indicated in the present case. Last but not least, the above decision has no binding effect in so far as it concerns another European patent.

3.5 Therefore, the subject-matter of claim 1 of the main request does not involve an inventive step (Article 56 EPC, 1973).

4. *Inventive step (first and second requests)*

4.1 Claim 1 of the first auxiliary request differs from claim 1 of the main request in that it contains the added feature that the gripper is also capable of **moving** the teat cups individually.

Claim 1 of the second auxiliary request differs from claim 1 of the main request in that it refers to **a robot arm for carrying a single teat cup** and having the gripping means.

4.2 In D1 the gripper ("Greifer") represented in Figure 9 is capable not only of engaging the teat cups individually but also of moving them individually. Moreover, in D1 the robot arm comprising the gripping means ("Mehrfachgreifer") - although it is represented in Figure 9 as carrying four teat cups for milking and one additional teat cup for foremilking - is also capable of carrying a single teat cup in so far as any support carrying a plurality of objects is also capable of carrying only one object.

Thus, the subject-matter of claim 1 of the first auxiliary request as well as that of the second auxiliary request differs from D1 by the same feature as claim 1 of the main request, i.e. by an additional teat cup suitable for foremilking and cleaning.

Therefore, the reasons given in point 3 above for the main request also apply to first and second auxiliary requests so that the subject-matter of claim 1 of these requests also lacks an inventive step.

4.2.1 In this respect, the respondent essentially submitted that the claimed subject-matter of the auxiliary requests defines a "single gripper" for carrying, moving and engaging only one teat, i.e. a gripper which is not capable of carrying and moving more than one teat cup, while the gripper shown in Figure 9 of D1 is adapted to carry and move five teat cups.

Even if the board were to accept this argument, the claimed subject-matter of first and second auxiliary request would not involve any inventive step for the following reasons.

Under this assumption, the claimed subject-matter would differ from the implement shown in Figure 9 of D1 not only by the above mentioned feature (i) but also in that

(ii) the robot arm comprises a "single gripper" (which is not capable of carrying and moving more than one teat cup).

There is no technical effect achieved by the features (i) and (ii) taken in combination. Furthermore, the "single gripper" of feature (ii) would be lighter and could be moved more quickly than the multiple gripper shown in Figure 9 of D1. Thus, feature (ii) would solve a partial problem of improving the efficiency of the milking robot with respect to connecting the teat cups to the teats. This partial problem has no relationship to the problem underlying feature (i) (see point 3.2) namely that of improving the hygiene level of the milking while retaining the advantage of a reduced contamination of the usable milk by the foremilking with the aid of a separate teat cup for removing the foremilk. Accordingly, the objective problem has to be regarded as an aggregation or juxtaposition of two distinct partial problems which can therefore be discussed independently when assessing inventive step (see T 389/86 OJ EO 1988, 87).

4.2.2 "Single grippers" (i.e. grippers which are not capable of carrying and moving more than one teat cup) are well known. Document D1 itself refers not only a "multiple gripper" but also to a "single gripper" ("Einzelgreifer"; see Figure 7 on page 117). Document

D4 also discloses a milking robot comprising a "single gripper" (see Figures 1 and 2). The skilled person knows that robotic systems with a single gripper are viable alternatives to "multiple gripper" systems. Further, he would immediately realize that a "simple gripper" is lighter then a "multiple gripper". Therefore, it would be obvious to provide the robot arm of the implement shown in Figure 9 of D1 with a "single gripper" instead of a "multiple gripper".

4.3 Therefore, the subject-matter of claim 1 of the first auxiliary request as well as that of claim 1 of the second auxiliary request do not involve an inventive step (Article 56 EPC, 1973).

Order

For these reasons it is decided that:

1. The decision under appeal is set aside.

2. The patent is revoked.

The Registrar: The Chairman:

G. Magouliotis M. Ceyte